Garden entomology

About eighteen months, ago John Badmin had published an item with this title (Antenna 25: 3) in answer to a query as to how to select plants so as to make a garden suitable "to encourage moths and their conservation" and made various useful suggestions. This article, together with a recent talk on the subject given by my local Wildlife Trust, set me both thinking and reminiscing on the subject as follows.

It is my opinion that a small garden in isolation, however well-intentioned to be designed for butterflies and moths, cannot do more than act as a feeding station for passing butterflies which are normally the already common species, especially migrants. It is highly unlikely that any foodplant supplied will be utilised except for those species that feed on Cruciferae such as cabbages and nasturtium (the Pieridae) and grasses (some Satyridae), in which case the lawn should resemble a haymeadow rather than the baize of a snooker table. Neighbours gardens also need to be taken into account. However much one person may try to accommodate insects, the effort can be entirely negated by a neighbour whose sole aim in the garden is to enhance the profits of the insecticide manufacturers. I have known it happen. What is needed is a concerted effort by a dozen or so adjoining neighbours co-operating with each other and with each garden catering for different butterfly and or moth tastes. This would well make the effort worthwhile, as it would be the equivalent of a large garden. Now large gardens, due to the present housing demand, are rapidly becoming a rarity, a thing of the past, and many that existed 50 or more years ago have been split up and built over. I can give a personal example of this. My father's house at Dover had nearly two acres of garden, about half of which was woodland or grass and ivy-covered hillside. Neighbouring gardens were also large and all had the advantage of adjoining a railway, the side of the track bed also being very suitable for butterflies. It was in fact a hay-type meadow, which was burnt irregularly in patches by sparks from the then steam trains which kept it that way. When seen last year it had become a dense strip of woodland, as had the adjoining bottom of father's old garden. There used to be plenty of room for patches of stinging nettle and completely uncultivated weedy areas. Between 1934 and 1955, I recorded 32 butterfly species in this garden, nearly half the total British species. Numbers were certainly declining by the 1950s and sadly two large blocks of flats have now been built on it. In my small Cambridge garden, also surrounded by similar, the total is 14, mostly being the common and wide-spread Pieridae and Nymphalidae with only six being known to breed, whereas the Dover garden had 24 species breeding in it.

Perhaps the most important thing when making a garden suitable for butterflies is location, location, location. There is little point if it is so urban that there is no outside source from which the butterflies can come. Nor is it any use having foodplants of species that do not occur within flying distance. There are of course a number of species which are so widespread and strong-flying, such as all the migrants, that foodplants for these might always be useful and may be used. One success in this respect has been the widespread planting of buckthorn *Rhamnus*

carthartica in recent years which has enabled the Brimstone butterfly Gonepteryx rhamni L. to expand its range. Before deciding which larval foodplants to use one should consult the distribution of species, which is now best done by consulting the recently published Millennium Atlas of butterflies of Britain and Ireland in which it can be discovered which species are most like to occur near the garden in question, and plant accordingly.

Concerning plants to be grown, the two most attractive nectar species I remember catching butterflies on in father's garden were the *Buddleia* and the Michaelmas daisies, both of which were often swarming with numbers of butterflies by day and moths by night. White *Buddleia* I am not so enamoured of, for both the blue and white varieties grew in the Entomological Field Station here in Cambridge and one rarely saw a butterfly on the white; they clearly preferred the blue. As for the moths' preferences, I cannot say. I would also like to know which species of moth John Badmin found attracted to *Nicotiana*. Yes, it has a lovely scent, but it also has a very deep trumpet flower and its nectar can only be reached by moths with a long proboscis, such as Humming-bird *Macroglossum stellatarum* L. and Convolvulus *Agrius convolvuli* L. Hawk-moths. Privet and ivy blossom are also very attractive to moths, but so many hedges are kept so trimmed they rarely, if ever, get a chance to flower!

In spring one of the most attractive flowers to moths is that of Sallows *Salix* spp., and in the autumn that of the Ivy *Hedera helix*. In between these times, are many of the naturally occurring flowers of the meadow and wayside — Bramble, Meadowsweet, Dandelion, Ragged Robin, hawkweeds, Scabious, Bugle, thistles, Garlic mustard, Ladies smock. Of the more ornamental flowers I would suggest *Alyssum*, Sweet William, *Aubretia*, *Phlox*, mignonette, *Aster* species, Michaelmas daisies, Candytuff, *Sedum*, and of course *Buddleia davidii* - preferably the dark blue variety. Nor should one neglect the needs of other insects, or indeed invertebrates. Some Golden rain and Fennel are extremely attractive to many species of Diptera and a pile or two of rotting wood, a heap of straw and a few tiles laid with space underneath them are ideal habitats for many invertebrates, not just insects.— BRIAN O. C. GARDINER, 2, Highfield Avenue, Cambridge CB4 2AL.

The Population Crash of the Small Tortoiseshell *Aglais urticae* (L.) (Lep.: Nymphalidae)

With reference to Leonard McLeod's note (*Ent. Rec.* 114: 201-202), I can confirm that there has also been a population crash of the Small Tortoiseshell in the last four years on the Isle of Wight, although it is now (2002) beginning to build up to its former numbers. In fact, I did not see one example in 2000, I saw one only in 2001 and two this year in the garden, although it has been quite plentiful in some parts of the Island this year.

Rowell (2001. Hampshire & Isle of Wight Butterfly & Moth Report. Butterfly Conservation) observed that many of the larvae had been parasitised and he sent the